

### **REMARKS**

Claims 1-22 are all the claims pending in the application. New claims 19-22 have been added to further define the invention. Reconsideration and allowance of all the claims are respectfully requested in view of the following remarks.

#### **Specification**

The Examiner objected to the abstract of the disclosure because it is not directed to the entire disclosure. Specifically, the Examiner asserted that the cardboard claimed in claims 4, 6, 12, and 18, should be included in the abstract of the disclosure. Accordingly, because cardboard is one embodiment of the invention, Applicants have amended the Abstract of the Disclosure to include cardboard therein.

The Examiner objected to the specification as including informalities. Specifically, the Examiner noted that on page 24, line 15, "polyolefine" is misspelled. Accordingly Applicants have corrected this informality. Also, Applicants have amended the paragraph bridging pages 23 and 24 so as to correct a typographical error.

#### **Claim Rejections - 35 U.S.C. § 112**

The Examiner rejected claims 1-18 under § 112, 2<sup>nd</sup> paragraph, as indefinite. The Examiner asserts three specific instances of indefiniteness. In order to overcome this rejection, Applicants have amended in part, and traverse it in part, as follows.

First, the Examiner asserts that there is an inconsistency between the specification (abstract) and the claims. Applicants have amended the abstract to clarify that that both smoothness conditions are not required. Additionally, the abstract has been amended to conform to the remainder of the specification in which the smoothness conditions for the contacting portion, and non-contacting portion, of the packaging material can be used either separately or together. For example, see the specification at: page 7, line 16 - page 8, line 16; page 24, 1<sup>st</sup> full paragraph; and page 26, lines 3-19. Further, dependent claims 19-22 have been added so as to set forth both smoothness conditions.

Second, the Examiner asserts that with respect to claims 1, 2, 7, and 13, there is no structure claimed for the packaging material and packaging structure, i.e., the physical shape of the packaging material and packaging structure is not established.<sup>1</sup> Applicants respectfully traverse this part of rejection. That is, the claims are not indefinite; they are merely broad. Breadth of a claim is not to be equated with indefiniteness.<sup>2</sup> By not reciting the shape of the packaging material or packaging structure, the claims encompass a packaging material or packaging structure having any shape. The definition of the invention in such broad terms does not make the claims indefinite.

#### **Claim Rejections - 35 U.S.C. § 102**

The Examiner rejected claims 1, 2, 7-10, and 13-16 under §102(b) as being anticipated by US Patent 4,376,816 to Hayashi et al. (hereinafter Hayashi). Applicants respectfully traverse this rejection for the following two reasons.

1) Hayashi fails to recognize the importance of an upper limit in smoothness as it affects the separation of the paper from the printing plate. This is because Hayashi pertains to a sheet for protecting photothermographic sheets, and Hayashi discusses ranges of smoothness effective only for protecting photothermographic sheets. In contrast, the present invention is for planographic printing plates. Thus, Hayashi and the present application are different from each other with respect to each of an object to be covered, required physical properties for ideal covering, and application of the invention. Accordingly, owing to such differences, the range of smoothness taught by Hayashi is fundamentally different from the ranges of smoothness recited in the claims of the present invention.

That is, the present invention is original in finding two effective ranges (one from 8 to 100 seconds and another from 250 to 900 seconds) and in considering automatic removal of a

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<sup>1</sup> Office Action at page 3, item 4, 3<sup>rd</sup> and 4<sup>th</sup> paragraphs.

<sup>2</sup> *In re Miller*, 441 F.2d 689, 169 USPQ 597 (CCPA 1971).

protecting material, after studying the complex requirements of the package structure for planographic printing plates.

2) With respect to claims 1 and 2, Applicants respectfully traverse this rejection for the following additional reasons. Specifically, Hayashi fails to disclose every element as set forth and arranged in the claims.

“[W]hen, as by a recitation of ranges or otherwise, a claim covers several compositions, the claim is ‘anticipated’ if *one* of them is in the prior art.”<sup>3</sup> On the other hand, however, when the prior art discloses a range which touches, overlaps or is within the claimed range, but no specific examples falling within the claimed range are disclosed, a case by case determination must be made as to anticipation. In order to anticipate the claims, the claimed subject matter must be disclosed in the reference with “sufficient specificity to constitute an anticipation under the statute.” What constitute “sufficient specificity” is fact dependent. If the claims are directed to a narrow range, the reference teaches a broad range, and there is evidence of unexpected results within the claimed narrow range, it may be reasonable to conclude that the narrow range is not disclosed with “sufficient specificity” to constitute an anticipation of the claims. See MPEP § 2131.03. In this case, the claims are directed to a narrow range that is overlapped by the range disclosed in Hayashi, and there is evidence of unexpected results. Therefore, Hayashi does not disclose the claimed range with “sufficient specificity” and is insufficient to establish anticipation.

First, the claims are directed to a narrow range that is overlapped by the broad range disclosed in Hayashi.

Claim 1 sets forth a material for packaging a planographic printing plate, wherein the printing plate includes an imaging surface, the material comprising opposing surfaces, one surface being for contacting the imaging surface of a printing plate, and the opposing surface having a Bekk smoothness from 3 seconds to 55 seconds.

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<sup>3</sup> *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (citing *In re Petering*, 301 F.2d 676, 682 USPQ 275, 280 (CCPA 1962)) (emphasis in original).

Claim 2 sets forth a package structure comprising at least one planographic printing plate having an imaging surface, and a packaging material packaging the printing plate, the packaging material having opposing surfaces, with one surface contacting the imaging surface of the printing plate, and the opposing surface having a Bekk smoothness from 3 seconds to 55 seconds. Similarly to claim 1, claim 2 sets forth a packaging material having a surface—for contact with the non-image forming side of a planographic printing plate—comprising a smoothness of from 3 seconds to 55 seconds.

Claim 8 sets forth a material for packaging a planographic printing plate, wherein the contact surface has a Bekk smoothness from 3 seconds to 100 seconds. Similarly to claim 8, claim 14 sets forth a package structure comprising at least one planographic printing plate and a packaging material, wherein a contact surface of the packaging material has a Bekk smoothness from 3 to 100 seconds.

In contrast to that set forth in each of claims 1, 2, 8, and 14, Hayashi discloses a paper for separating planographic printing plates, wherein the paper has a Bekk smoothness in the broad range of from 5 seconds to 10,000 seconds. Thus, Hayashi's range overlaps that claimed by Applicants. Further, Hayashi fails to disclose a value within Applicants' claimed range. That is, Hayashi's Examples 1, 2, and 4, respectively disclose Bekk smoothnesses of 360, 600, and 720 seconds. None of these values is within Applicants' claimed range of from 3 to 55 seconds, or within Applicants' claimed range of from 3 to 100 seconds.

Second, Applicants have shown unexpected results for their narrow range.

As set forth in the present specification, a Bekk smoothness from 3 seconds to 55 seconds—for the surface of the packaging material to contact the non-image side of the planographic sheet—is an important feature that produces unexpected results. Because of its smoothness, the packaging material of the present invention achieves a high separability from a non-imaging surface of a planographic printing plate, and can be produced at low costs.<sup>4</sup> In

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<sup>4</sup> Specification at page 7, 1<sup>st</sup> full paragraph.

particular, the upper limit of 55 seconds is an important element of the present invention. When the smoothness rises above 55 seconds, there is difficulty separating a packaging material from a planographic printing plate. Note Table 1, wherein the example having smoothness of 65 seconds sometimes adhered to and was not separated from the planographic printing plate. Also, see page 16, line 8 - page 18, line 2. That is, when the smoothness is above 55 seconds, the packaging material sometimes adheres to and is not separated from the non-imaging surface, and is fed together with the planographic printing plate in an automatic plate-making machine. Therefore, a smoothness between 3 seconds and 55 seconds according to the present invention, assures that the packaging material can be separated from the non-image surface with certainty in an automatic plate-feeding mechanism and deterioration of the imaging surface is prevented.<sup>5</sup>

As set forth in the specification, a Bekk smoothness from 3 seconds to 100 seconds—for the surface of the packaging material that contacts the non-image side of the planographic sheet—is an important feature that produces unexpected results. Because of its smoothness, the packaging material of the present invention can prevent peeling of the film with more certainty.<sup>6</sup>

Hayashi fails to recognize the importance of an upper limit in smoothness as it affects the separation of the paper from the printing plate in an automatic plate-feeding machine. That is, Hayashi recognizes an upper limit of 10,000 on the smoothness in light of its further inability to improve the stability of the photothermographic sheet material.<sup>7</sup> Further, Hayashi recognizes that same upper limit as being one past which blocking takes place between the sensitive emulsion layer of the photothermographic sheet material and the paper during storage for a long period of time. Although Hayashi's latter consideration relates to separability, this upper limit is two to three orders of magnitude greater than Applicants' claimed upper limit for a planographic printing plate. Therefore, one of ordinary skill in the art, following the teachings of Hayashi,

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<sup>5</sup> Specification at the paragraph bridging pages 17 and 18.

<sup>6</sup> Specification at page 8, lines 12-20; page 20, table 2; and page 21, 1<sup>st</sup> full paragraph.

<sup>7</sup> Hayashi at col. 2, lines 62-68.

would expect that smoothnesses well in excess of 55 seconds, or even 100 seconds, would not affect separability.

For the above reasons, Hayashi fails to disclose Applicants' range with "sufficient specificity" and, therefore, fails to anticipate Applicants' claims 1, 2, 8, and 14.

Further, although Hayashi recognizes separability—i.e., preventing blocking—as desirable, he still finds an upper limit of 10,000 seconds, which is 2-3 orders of magnitude greater than Applicants' upper limit on smoothness. Therefore, one of ordinary skill in the art would not readily envisage Applicants' narrow range of smoothness of 3 to 55 seconds, or Applicants' narrow range of smoothness of 3 to 100 seconds, from Hayashi's broad range. Accordingly, Hayashi also fails to render obvious Applicants' claimed smoothness ranges.

For at least any of the above reasons, claims 1, 2, 7-10, and 13-16, are not anticipated by Hayashi.

### **Claim Rejections - 35 U.S.C. § 103**

The Examiner rejected claims 3, 5, 11, and 17 under §103(a) as being unpatentable over Hayashi in view of US Patent 6,306,254 to Usui (hereinafter Usui '254) and further in view of Japanese 03036545 to Goto et al. (hereinafter Goto). Applicants respectfully traverse this rejection because the reference fail to establish *prima facie* obviousness in that they do not teach or suggest every element as set forth in Applicants' claims.

The Examiner notes that Hayashi fails to teach or suggest a packaging material having a density of 0.7 to 0.85 g/cc or a moisture of 4% to 6%.<sup>8</sup> However, as noted above, Hayashi also fails to disclose a packaging material and a planographic printing plate, wherein the packaging material has a Bekk smoothness of 3 to 100 seconds.

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<sup>8</sup> Office Action at the paragraph bridging pages 5 and 6.

The Examiner cited Usui '254 as disclosing an interleaf paper having a weight of about  $38 \text{ g/m}^2$ , a density of about  $0.8 \text{ g/cm}^3$ , and a moisture of about 6%.<sup>2</sup> But Usui '254 does not teach or suggest a packaging material having a Bekk smoothness of 3 to 100 seconds.

Further the Examiner cited Goto as teaching a moisture content confined to 8%.<sup>10</sup> But Goto does not teach or suggest not teach or suggest a packaging material having a Bekk smoothness of 3 to 100 seconds.

Accordingly, for the sake of argument, even assuming that one of ordinary skill in the art were motivated to combine Hayashi, Usui '254, and Goto, as suggested by the Examiner, any such combination would still not include all of the elements as set forth in Applicants' claims.

The Examiner rejected claims 4, 6, 12, and 18, under §103(a) as being unpatentable over Hayashi in view of US Patent 5,729,962 to Dirx (hereinafter Dirx) and further in view of Japanese 8-39958 to Usui et al. (hereinafter Usui '958). Applicants respectfully traverse this rejection because the reference fail to establish *prima facie* obviousness in that they do not teach or suggest every element as set forth in Applicants' claims.

The Examiner notes that Hayashi fails to teach or suggest a packaging material that is cardboard with a weight of approximately  $640 \text{ g/m}^2$  having a density of approximately  $0.72 \text{ g/cc}$ .<sup>11</sup> However, as noted above, Hayashi also fails to disclose a packaging material and a planographic printing plate, wherein the packaging material has a Bekk smoothness of 3 to 100 seconds.

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<sup>2</sup> Office Action at page 6, 1<sup>st</sup> full paragraph.

<sup>10</sup> Office Action at the paragraph bridging pages 6 and 7.

<sup>11</sup> Office Action at the paragraph bridging pages 7 and 8.

The Examiner cites Dirx as disclosing a sheet of cardboard provided under a stack of photographic plates as a component of a package.<sup>12</sup> But Dirx does not teach or suggest a packaging material having a Bekk smoothness of 3 to 100 seconds.

The Examiner cited Usui '958 as teaching a protection paper cover having a weight of about 640 g/m<sup>2</sup>, a density of 0.72 g/cm<sup>3</sup>.<sup>13</sup> But Usui '958 does not teach or suggest a packaging material having a Bekk smoothness of 3 to 100 seconds.

Accordingly, for the sake of argument, even assuming that one of ordinary skill in the art were motivated to combine Hayashi, Dirx, and Usui '958, as suggested by the Examiner, any such combination would still not include all of the elements as set forth in Applicants' claims.

#### **Information Disclosure Statement (IDS)**

The Examiner failed to initial all the references cited on the PTO form-1449 submitted with the IDS of February 21, 2001. In particular, the Examiner failed to initial—and thereby indicate consideration of—Japanese 3-36545, Japanese 2-25845, Japanese 10-197992 and Japanese 10-282681. Therefore, Applicants respectfully request that the Examiner return a properly initialed copy of the PTO form-1449 with his next Office Action. For the Examiner's convenience, a copy of the February 21 IDS submission is enclosed herewith.

#### **Conclusion**

New claims 19-22 have been added to further define the invention. Claims 19-22 respectively depend from claims 1, 2, 7, and 13. Therefore, claims 19-22 should be allowable at least by virtue of their dependency.

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<sup>12</sup> *Id.*

<sup>13</sup> Office Action at page 8, 2<sup>nd</sup> full paragraph.



In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Jeffrey A. Schmidt", is written over a horizontal line.

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**APPENDIX**  
**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE SPECIFICATION:**

**The paragraph bridging pages 23 and 24 has been amended as follows:**

Further, in the second embodiment, Bekk smoothness of the contacting portion (a portion contacting the coating film) of the piece of protection cardboard 32 is between 3 seconds and [90] 900 seconds as the contacting portions of the interleaf sheets 14 of the first embodiment. Therefore, in the second embodiment, film peeling is also prevented in such a case in which the piece of protection cardboard 32 and the coating film are rubbed by each other, for example, during transportation or the like. Particularly, when a piece of the protection cardboard 32 with a contacting portion having Bekk smoothness between 3 seconds and 100 seconds or between 250 seconds and 900 seconds is used, film peeling of the planographic printing plates 10 is prevented regardless of types of the planographic printing plates 10.

**The paragraph bridging pages 24 and 25 has been amended as follows:**

In addition, as long as the protection cardboard 32 satisfies either one of the Bekk smoothness conditions described above, materials and other physical properties thereof are not particularly limited. For example, wood pulp, natural fiber such as hemp, synthetic pulp obtained from linear macromolecule such as [polyolefine] polyolefin or the like, regenerated cellulose, or the like, can be used solely or in combination as materials for the protection cardboard 32. Particularly, the protection cardboard 32 can be produced at low cost by selecting low cost materials such as wood pulp or natural fiber. More specifically, the protection cardboard 32 having density of 0.72 g/cm<sup>3</sup> and basic weight of 640 g/m<sup>2</sup>, which is produced by using stuff obtained by beating material waste paper, adding a sizing agent of 0.1% of a cardboard weight and a strengthener of 0.2% of the cardboard weight to the stuff diluted to a density of 4%, and further adding aluminum sulfate to the stuff until pH becomes 5.0, can be included, however, of course, this is not to limit the protection cardboard 32 of the present invention.

**IN THE CLAIMS:**

Claims 19-22 have been added as new claims.

**IN THE ABSTRACT OF DISCLOSURE:**

The abstract has been amended as follows:

A surface of a packaging material—which may include an interleaf sheet 14, a protection cardboard 22, 32, or an inner packaging material 36—for protecting a coating film of a planographic printing plate 10, which does not contact the coating film of the planographic printing plate 10, has a Bekk smoothness between 3 seconds to 55 seconds. [A] In addition to, or instead of, the foregoing smoothness condition, a contacting portion of the [interleaf sheet 14] packaging material, which contacts the coating film, has a Bekk smoothness between 3 seconds to 900 seconds.